

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,894		02/24/2004	Masato Nakatani	008312-0308433 1002	
909	7590	07/01/2005		EXAMINER	
PILLSBUR P.O. BOX 10		HROP SHAW PI	KLAUS, LISA NHUNG		
	MCLEAN, VA 22102				PAPER NUMBER
•· ,			2832	,	

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

EX

	Application No.	Applicant(s)				
	10/784,894	NAKATANI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Lisa N. Klaus	2832				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
 Responsive to communication(s) filed on the and the angle This action is FINAL. Since this application is in condition for allower closed in accordance with the practice under Expression 	action is non-final. nce except for formal matters, pro					
Disposition of Claims						
4) ☐ Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-20 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.					
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on 21 April 2005 is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Ex	☑ accepted or b)☐ objected to lead accepted or b)☐ objected to lead and accepted by acceptance. See the drawing(s) is object is accepted and accepted by accepted to be accepted by accepted to be accepted accepted by accep	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

Application/Control Number: 10/784,894 Page 2

Art Unit: 2832

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-11, 13-15, 17, 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (US 5,927,483) in view of Udagawa (US 4,967,467).

Yamada discloses a switch comprising:

- Regarding claims 1, 10, 14 and 18, Yamada discloses:
 - a housing 1 and 4 having an outer wall;
 - the plurality of arms being elastically deformable to move;
- Regarding claims 1, 10, 14 and 18, Yamada does not discloses a push button secured to the outer wall by an arm and overlapping the arm.

Udagawa discloses a method of manufacturing a pushbutton assembly for a switch comprising a push button 2 secured to the outer wall by an arm 13 and overlapping the arm 13.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the push button 2 overlaps the arm 13 as taught by Amari with Yamada's switch for the purpose of holding the push button firmly.

- Regarding claims 2 and 15, Yamada discloses:
 - the arm and the push button are formed integral with each other;
- Regarding claim 3, Yamada discloses:
 - the outer wall and the arm are formed integral with each other;
- Regarding claim 4, Yamada discloses:

Application/Control Number: 10/784,894 Page 3

Art Unit: 2832

- a frame 1 secured to the outer wall and supporting the arm;

- Regarding claim 5, Yamada discloses:

- the arm and frame are formed integral with each other;

- Regarding claims 6 and 13, Yamada discloses:

- the outer wall has a hole, 1a in which the frame 1 is fitted;

- Regarding claims 7, 11, 17 and 20 Yamada discloses:

- the push button 2b comprises a base (see the attachment) and a button top larger than the base, and the arm 2c extends from the base to the frame and is covered by the button top;

- Regarding claim 8, Yamada discloses:

- frame 1 is surrounds the base and the arm 2c:

- Regarding claim 9, Yamada discloses:

- the housing has a switch 3a which opposes the push button and which is to be actuated when the push button is depressed;

- Regarding claims 11, 17 and 20, Yamada in figure 2 discloses:

- the push button 2 comprises a base 2a and a button top larger than the base, and the arms couple the base and the frame together and are covered by the button top.
- 2. Claims 12 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada and Udagawa in view of Amari et al. (US 6,603,083).

Yamada and Udagawa disclose the instant claim invention as discussed above except for the frame, arm and base are made of synthetic resin.

Amari discloses a push switch structure comprising:

- the key switch bodies 8 and 9 made of synthetic resin.

Application/Control Number: 10/784,894

Art Unit: 2832

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the synthetic resin key switch bodies as taught by Amari with Yamada's switch for the purpose of securing the operating touch, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Response to Arguments

- 3. Applicant's arguments with respect to claims 1, 10, 14 and 18 have been considered but are most in view of the new ground(s) of rejection.
- Page 9, paragraph 3, Applicant argues that Yamada fails to teach "a push button that is configured to overlap the elastically deformable arm". This argument is not found to be persuasive because the newly found references of Udagawa is applicable to the limitation of claims 1, 10, 14 and 18. Therefore, a new ground of the rejection is presented.
- Page 10, paragraph 4, Applicant argues that "Amari does not teach or suggest a push button that is configured to overlap the elastically deformable arm". This argument is not found to be persuasive because Amari is only cited to teach the key switch bodies made of synthetic resin.

Allowable Subject Matter

4. Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

The prior art does not teach or suggest the button region includes a recess defined by side wall which surround the push button and the arm protrudes toward the push button from the side wall.

Application/Control Number: 10/784,894

Art Unit: 2832

Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance."

Conclusion

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as

set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS

from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the

mailing date of this final action and the advisory action is not mailed until after the end of the

THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the

date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

calculated from the mailing date of the advisory action. In no event, however, will the statutory

period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication should be directed to Lisa Nhung Klaus whose

telephone number is (571)272-1993, and whose fax number is 703-872-9306. In the event that I

am not reached, you can contact my supervisor, Mr. Elvin G. Enad at (571)272-1990 or the tech

center receptionist at (703) 308-1782.

Lisa Nhung Klaus

Patent Examiner - Art Unit 2832

June 15, 2005

C/24/05

Page 5

Art Unit: 2832

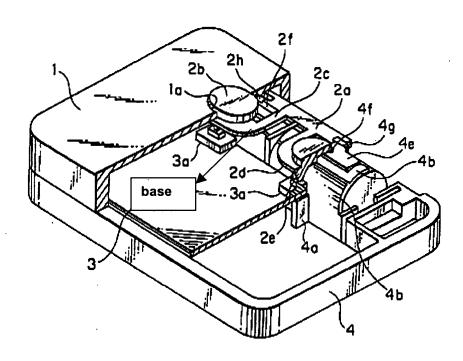


FIG. 2